

# Babesiosis

*Disease Fact Sheet Series*

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## What is babesiosis?

Babesiosis is a rare, sometimes severe, and occasionally fatal tick-borne disease caused by a parasite which infects red blood cells. Although babesiosis is not officially reportable in Wisconsin, the Division of Public Health is aware of 14 cases which occurred in the state between 1983 and 2000.

## Who gets babesiosis?

Babesiosis is seen most frequently in the elderly or in persons whose immune system is impaired (e.g. individuals who have had their spleens removed or who are on certain types of cancer therapy). Cases of this disease have been reported during spring, summer and fall in northwestern Wisconsin and in coastal areas in the northeastern United States, especially Nantucket Island off the Massachusetts shore and on Long Island, New York. Cases have also been reported in California, Georgia and some European countries.

## How is babesiosis spread?

Babesiosis is caused by *Babesia microti*, a parasite transmitted by the bite of an infected deer tick. (This same tick species, *Ixodes scapularis*, can also carry the Lyme disease bacterium.) The tick is carried by meadow voles, mice and deer. Less commonly, transmission can also occur via contaminated blood transfusions if the donor had babesiosis.

## What are the symptoms of babesiosis?

The disease can cause fever, fatigue and anemia lasting from several days to several months. Symptoms tend to be more apparent and severe in immunocompromised persons. Infections can also occur without producing symptoms.

## How soon do symptoms appear?

It may take from one to 12 months for symptoms to appear; less for asplenic people.

## Does past infection with babesiosis make a person immune?

It is not known whether past infection can make a person immune.

(Over)

**What is the treatment for babesiosis?**

Standardized treatments for babesiosis have not been developed. However, antibiotics combined with certain drugs used in the treatment of malaria have been found to be effective in some patients with babesiosis.

**What can be done to prevent the spread of babesiosis?**

It is important to control rodents around human habitat. If you are in areas where ticks may be present, the following precautions can reduce the risk of acquiring babesiosis:

- Wear a long-sleeved shirt, long pants, and high socks with pant cuffs ticked into the socks.
- Light-colored clothing will make ticks easier to find.
- Walk in the center of mowed trails to avoid brushing up against vegetation.
- Conduct thorough “tick checks” on yourself and your children after spending time outdoors.
- Prompt removal of ticks, can drastically reduce the chance of disease transmission.
- Insect repellents containing 0.5% permethrin or 20-30% DEET have been shown to be effective in repelling deer ticks. If such products are used, be sure to follow the manufacturer’s directions on the label.